

# Appendix A

## **Description of Alternatives A & B Pipe Alignments**

# Appendix A

## Description of Alternatives A & B

### Pipe Alignments

The following figures (A-1 through A-6) present the alternative alignments A and B. In all figures, Alternative A is presented in green lines and Alternative B, the preferred alternative, is presented with red lines.

Figure A-1 presents the alternatives for Poblado Morelos. The project includes collectors east and west of a pump station, and the alternative alignments were developed for the lines west of the pump station. Alternative A consists of a collector connecting to the existing system in the area of Colinas de Rosarito. Alternative B would have a collector from the pump station to a connection point in the area of Ejido Mazatlán.

Figure A-2 presents the alternatives for La Mina, which follow very similar alignments and would require approximately the same construction.

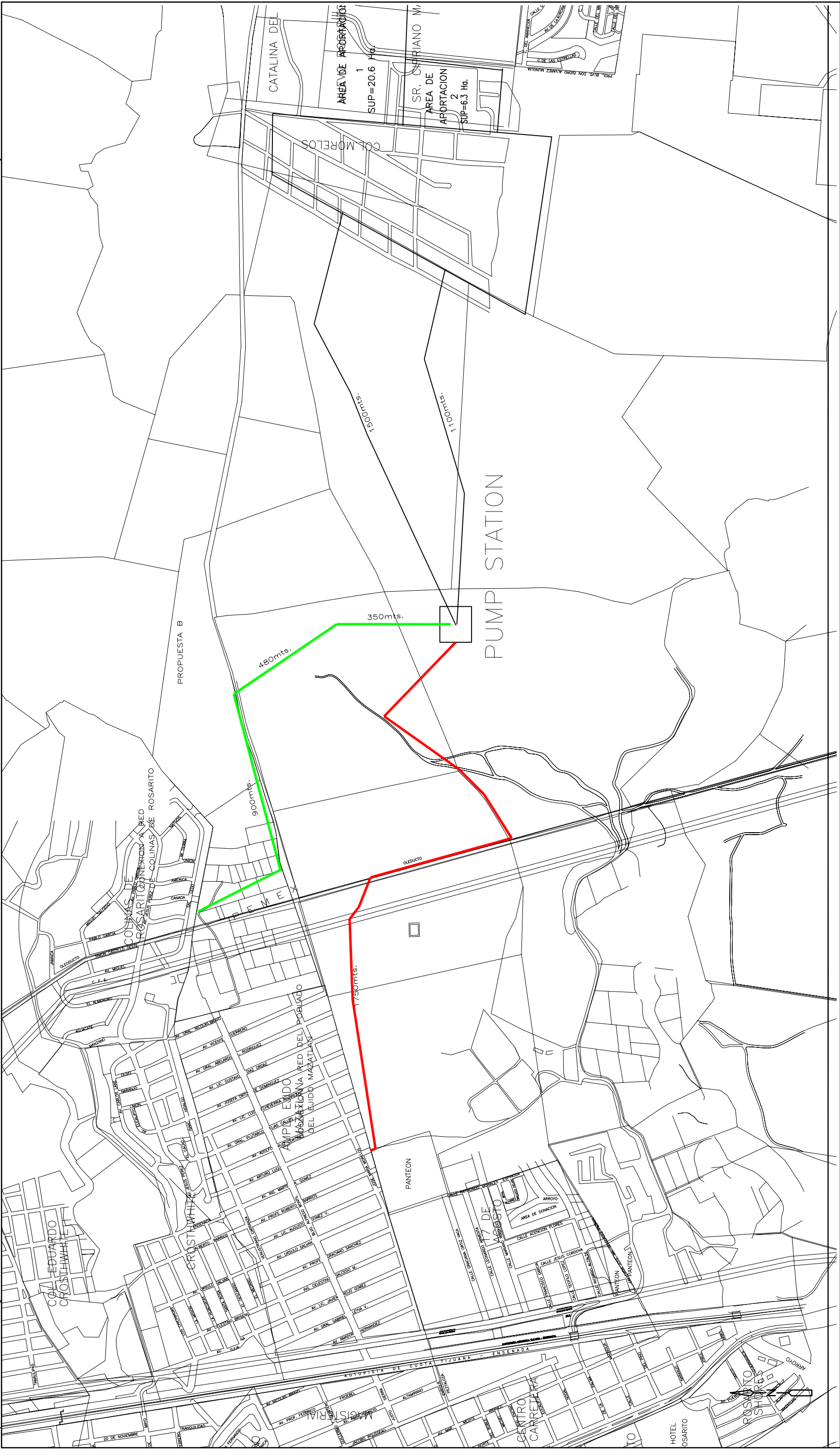
Figure A-3 presents the alternatives for the project in Santa Lucia. In this case, Alternative A would include two small pump stations and an interceptor running east to west along Blvd. Los Cunados, separating Santa Lucia (north) from Lomas de Rosarito (south). This interceptor would connect to a new collector along Blvd. Miguel Hidalgo that connects to the existing Collector La Gloria. Alternative B would consist of two new collectors that would connect the flow from Santa Lucia to the existing system downstream of it in Lomas de Rosarito. The systems would be connected at Calle Mina El Morro and Calle Mina El Triunfo. Thus, instead of intercepting the flow at Blvd. Los Cunados and not allowing the wastewater from Santa Lucia to enter the Lomas de Rosarito system (which happens in Alternative A), Alternative B would use the existing Lomas de Rosarito system to convey the flow from Santa Lucia further downstream.

Figure A-4 presents the alternatives for the project in Colinas de Monte Carlo. Alternatives A and B are similar to the Santa Lucia Alternatives. Alternative A intercept flows from Colinas de Monte Carlo and takes them to a connection to La Gloria-Rosarito collector (existing), while Alternative B would establish a connection between the Colinas de Monte Carlo and Santa Lucia systems, with the construction of several small collectors that connect to existing manholes along Avenida Independencia. These collectors are shown in red in Figure A-4, and the direction of flow is indicated in red too (from Colinas de Monte Carlo to Santa Lucia).

Figure A-5 presents the alternatives for the project in Campestre Lagos. Alternatives A and B are similar to the Santa Lucia and Colinas de Montecarlo Alternatives. Alternative A would provide a pump station and a line to connect all flow from Campestre Lagos to the La Gloria-Rosarito collector (existing), while Alternative B

would provide two collectors connecting the flows from Campestre Lagos to two connection points along the La Gloria-Rosarito collector.

Figure A-6 presents the alternatives for the project in Colinas de Rosarito. Both alternatives collect flow from two different parts of the Colinas de Rosarito area in Calle Ensenada and Av. Vicente Guerrero. Alternative B would simply connect the flow collected in these two locations to the existing system immediately downstream in Colonia Crosthwhite and Ampliación Ejido Mazatlán (respectively). The red lines in Figure A-6 show the collectors required to accomplish this and the end point as an arrow indicates the direction of flow. Alternative A would require long collectors that would convey the flow from the two collection points to a manhole in Colonia San Fernando.



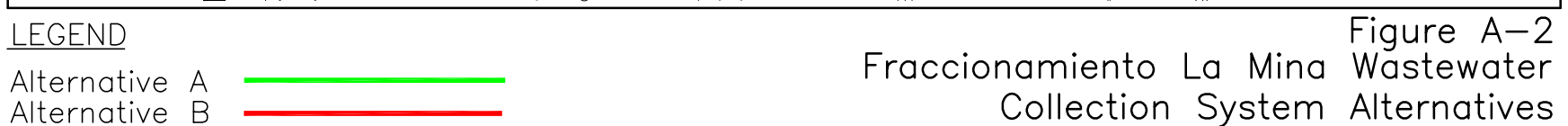
**LEGEND**

Alternative A

Alternative B

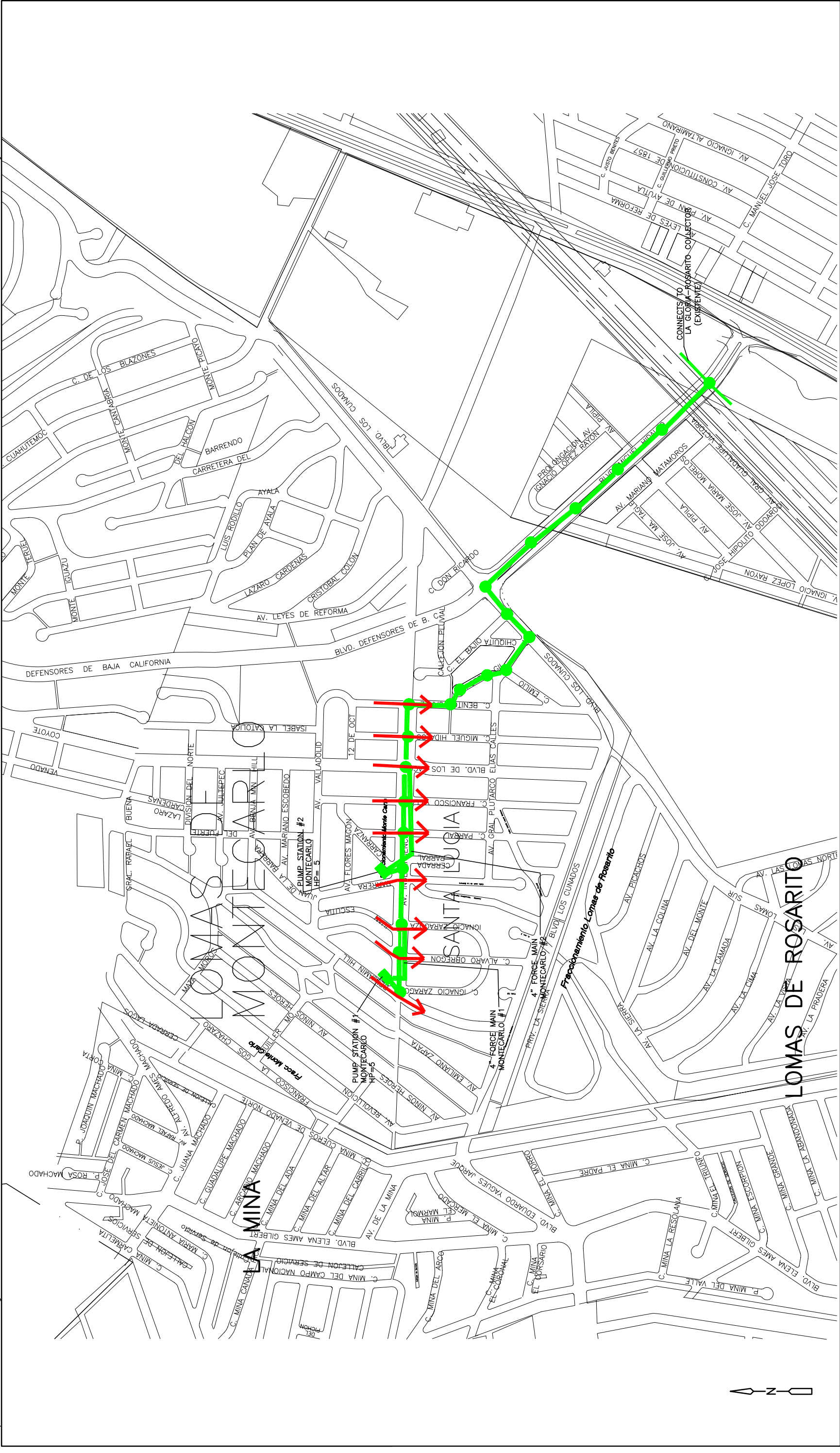
Poblado Morelos Wastewater Collection System

Figure A-1 Alternatives









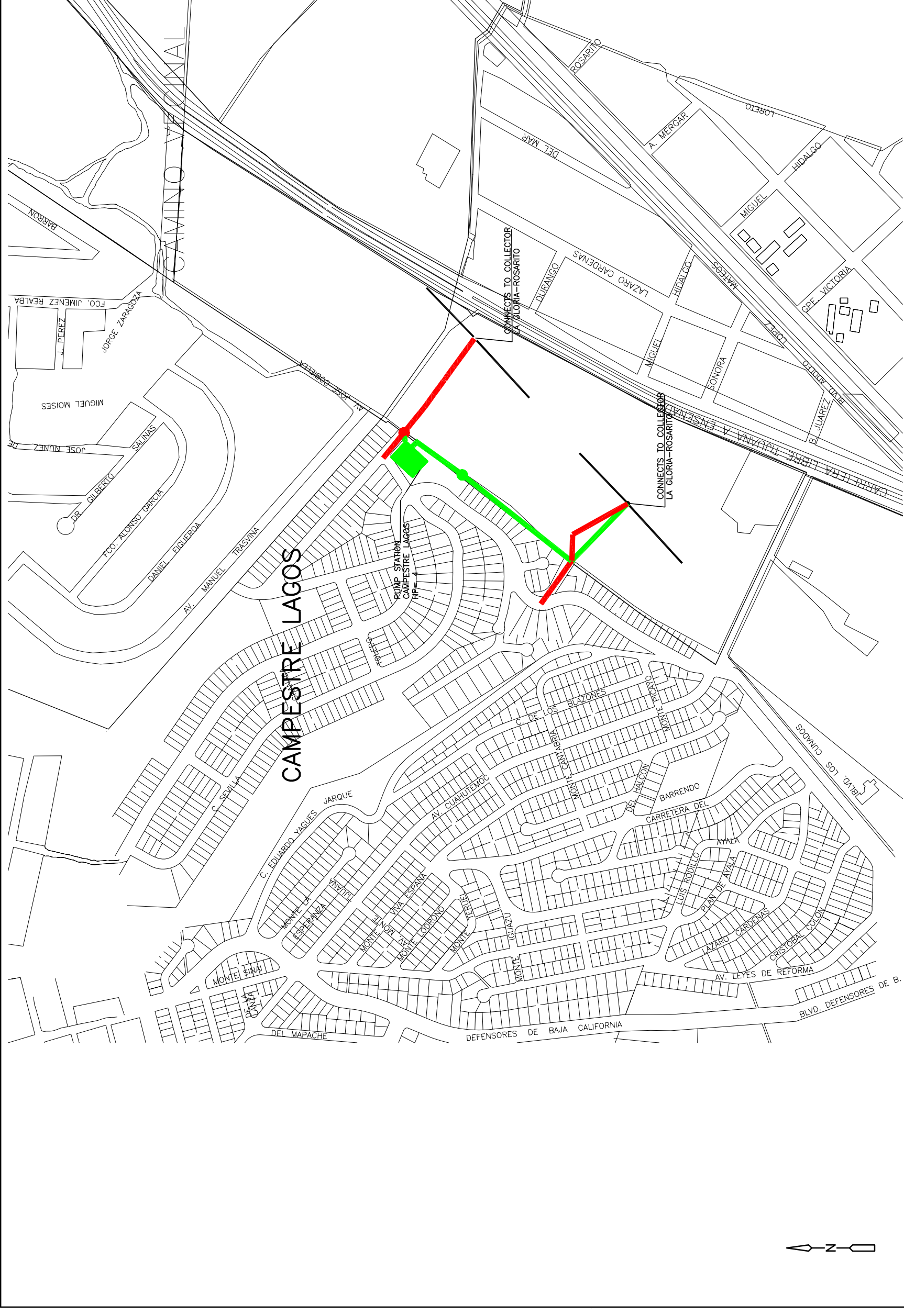
**LEGEND**

Alternative A 

Colinas de Montecarlo Wastewater Collection System 

Figure A-4  
Alternatives





LEGEND

Alternative A

Alternative B

Fraccionamiento Campestre Lagos Wastewater Collection System Alternatives

Figure A-5



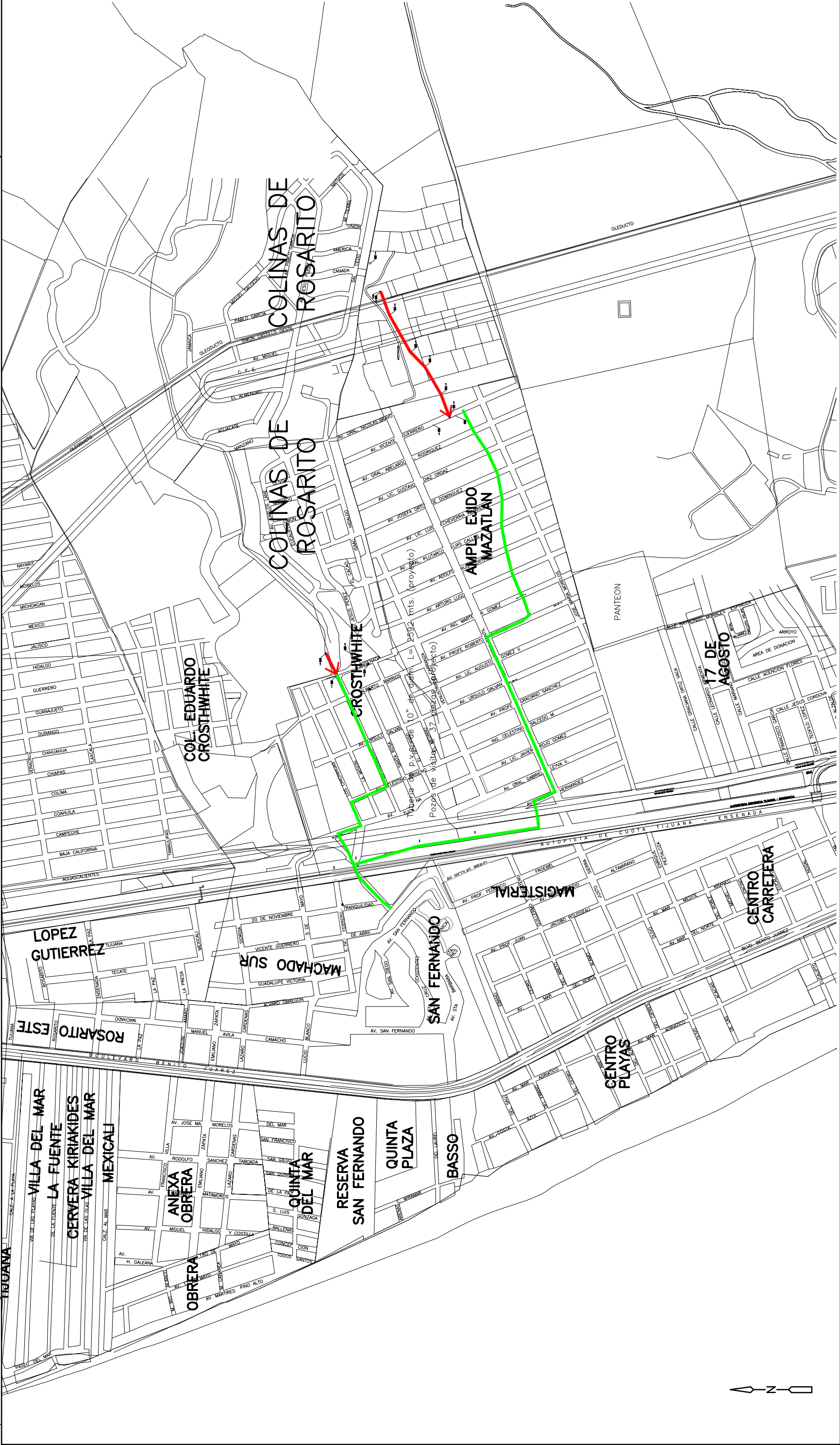


Figure A-6  
Colinas de Rosarito Wastewater Collection System Alternatives